

SUPPORT ASSEMBLY FOR A HORIZONTALLY-EXTENDING MEMBER

FIELD OF INVENTION

[0001] This invention relates to support assemblies for horizontally extending members. The horizontally extending member may for example be part of a sawhorse, a fence, or scaffolding.

BACKGROUND OF INVENTION

[0002] Many different types of support assemblies have been used in the past for horizontally extending members such as those mentioned above. However, there is still a need for a support assembly which is simple, inexpensive, easy to assemble and dismantle and is sufficiently strong.

SUMMARY OF INVENTION

[0003] According to the present invention, a support assembly for a horizontally extending member includes a pair of support devices, each support device having a leg with a lower end engageable with the ground and an upper end carrying a retainer for retaining the horizontally extending member in position, and a securing means operable to secure the legs of the support devices together with the legs diverging downwardly from and laterally of the horizontally-extending member in a member supporting, configuration. The legs may also diverge downwardly from and longitudinally of the horizontally-extending member to provide increase longitudinal stability.

[0004] Each retainer may have a horizontally extending rectangular aperture which slidably receives a horizontally-extending member of corresponding rectangular section. The securing means may comprise a nut and bolt, and each leg may be of adjustable length.

DESCRIPTION OF THE DRAWINGS

[0005] Embodiments of the invention will now be described, by way of example, with reference to the accompanying drawings, of which:

Fig. 1 is a perspective view of a sawhorse utilizing two support assemblies in accordance with one embodiment of the invention,

Fig. 2 is an exploded view of one of the support assemblies,

Fig. 3 is a perspective view of a fence utilizing two support assemblies, and

Fig. 4 is a side view of another fence utilizing two support assemblies.

DESCRIPTION OF PREFERRED EMBODIMENTS

[0006] Referring to the drawings, Fig. 1 shows a sawhorse utilizing two support assemblies 12 in accordance with one embodiment of the invention, the support assemblies 12 supporting a horizontally extending member 14 of rectangular section. Each support assembly has a pair of support devices 16, with each support device having a tubular leg 18 of square section with a lower end 20 engageable with the ground and an upper end carrying a retainer 22 for retaining the horizontally-extending member 14 in position.

[0007] The legs 18 of the support devices 16 of each support assembly 12 are secured together by a bolt 24 which extends through the legs 18 just below the retainer 22, the bolt 24 being provided with washers 25 and being secured by a nut 26. In this embodiment, the rectangular shape of the horizontal member 14 and the retainers 22 serve to retain the legs 18 of the support assembly 12 in a position in which the legs 18 diverge downwardly from and laterally of the horizontal member 14 in a member supporting configuration. The legs 18 also diverge downwardly from and longitudinally of the horizontal member 14 to provide increased longitudinal stability. The angle of inclination in this respect may be about 10-15°, as indicated in Fig. 4.

[0008] The legs 18 are of adjustable length such that the height of the horizontal member 14 can be adjusted. Each leg 18 has an upper part 30 and a lower part 32 telescopically slidable therein. Each leg part 30, 32 has a series of apertures 34, 36 respectively spaced along the length thereof, and a pin 38 positionable in aligned apertures 34, 36 to secure the leg

parts 30, 32 at a desired length. The pin 38 is retained in position by a spring clip 40. The lower leg part 32 carries a foot plate 42 at its lower end.

[0009] Fig. 1 shows two support assemblies being used as a sawhorse. Fig. 2 illustrates how easily the support assemblies can be assembled and dismantled.

[0010] Fig. 3 shows the use of two support assemblies with two horizontal members 44 which are connected by a hinge 46 to form part of a fence. Fig. 4 shows the use of two support assemblies with two horizontal members 44 which are connected by an in-line connector 50 which has a horizontally-extending rectangular aperture which receives end portions of the two horizontal members 44. The connector 50 has two bolts 52 threadedly mounted therein which can be rotated to cause their inner ends to engage the respective horizontal members 44 and retain them in the connector 50.

[0011] If desired, support assemblies in accordance with the invention may also be used as scaffolding components.

[0012] It will now be readily apparent to a person skilled in the art that a support assembly in accordance with the invention is simple, inexpensive, easy to assemble and dismantle and suitably strong. The support assembly may be constructed of suitable metal and/or plastic material. The scope of the invention is defined in the appended claims.